## 510(k) Summary

In accordance with 21CFR807.92, the following summary of information is provided;

Date Jan 5<sup>th</sup> 2012

Submitter: ALPINION MEDICAL SYSTEMS Co., Ltd.

Address: 1,6 and 7FL, 222-22, Guro-dong, Guro-gu, Seoul, 152-

848, Korea Republic

Primary Contact Person Donghwan Kim

**QARA** Manager

Address: 1,6 and 7FL, 222-22, Guro-dong, Guro-gu, Seoul, 152-

848, Korea Republic Phone: +82 70 7465 2068 Fax: +82 2 851 5594

Email: donghwan.kim@alpinion.com

Secondary Contact Yuchi Chu

Person Address: Suite 229, 10604 NE 38th Place, Kirkland, WA 98033,

United States Phone: 425 949 4907 Fax: 425 949 4908

Email: ychu@alpinionus.com

Device Trade Name: E-CUBE 9

Common/Usual Name: Ultrasonic Pulsed Doppler Imaging System

Classification Names System, Imaging, Pulsed Doppler Ultrasonic

Product Code: Ultrasonic Pulsed Doppler Imaging System, 21CFR 892.1550 90-

IYN

Ultrasonic Pulsed Echo Imaging System, 21CFR 892.1560, 90-IYO Diagnostic Ultrasound Transducer, 21CFR 892.1570, 90-ITX

Predicate Device(s) K060993 LOGIQ P5/A5 Diagnostic Ultrasound System

12120060 Page 2 22

#### Device Description:

E-CUBE 9 product is an ultrasound imaging system for medical diagnosis. This product can be used for the applications of abdominal, obstetrics, gynecology, small parts, cardiology, vascular, etc.

The system platform provides optimal patient diagnosis workflow with the wide flat panel display, ergonomic control panel with easy user interface, optimal image quality

#### Indications For Use:

The device is intended for use by a qualified physician for the evaluation of soft tissue and blood flow in the clinical applications; Fetal; Abdominal (renal & GYN/pelvic); Pediatric; Small Organ (breast, testes, thyroid); Trans-rectal(TR); Trans-vaginal(TV); Musculo-skeletal(Conventional); Musculo-skeletal (Superficial); Cardiac (adult & pediatric); Peripheral Vascular (PV); and Urology (including prostate).

#### Technology:

E-CUBE 9 employs the same fundamental scientific technology as its predicate device.

#### <u>Determination of</u> Substantial Equivalence:

#### Summary of Non-Clinical Tests:

E-CUBE 9 has been evaluated for biocompatibility, acoustic output as well as thermal, electrical, electromagnetic, and mechanical safety, and has been found to conform to applicable medical device safety standards. E-CUBE 9 and its application comply with voluntary standards as detailed in this premarket submission. The following quality management system measures were applied to the development of E-CUBE 9:

- Medical Device Risk Management
- Requirements Reviews
- Design Reviews
- Component Verification
- Integration Review (System Verification)
- Performance Testing (System Verification)
- Safety Testing (Compliance Test)
- Design Validation

Transducer materials and other patient contact materials are biocompatible.

#### **Summary of Clinical Tests:**

The subject of this premarket submission, E-CUBE 9, did not require clinical studies to support substantial equivalence.

#### Conclusion:

Alpinion Medical Systems Co., Ltd. Considers E-CUBE 9 to be as safe, as effective, and performance is substantially equivalent to the predicate device.

ALPINION MEDICAL SYSTEMS Co., Ltd. will update and include in this summary any other information deemed reasonably necessary by the FDA or the requirements will be published in guidance documents.



Food and Drug Administration 10903 New Hampshire Avenue Silver Spring, MD 20993

Alpinion Medical Systems Co., Ltd. % Mr. Yuchi Chu
Correspondent
AUS Co., Inc.
10604 NE 38<sup>th</sup> Place, Suite 229
KIRKLAND WA 98033

MAR. 1 6 2012

Re: K120060

Trade/Device Name: E-CUBE 9

Regulation Number: 21 CFR 892.1550

Regulation Name: Ultrasonic pulsed doppler imaging system

Regulatory Class: II

Product Code: IYN, IYO, and ITX

Dated: January 9, 2012 Received: January 9, 2012

#### Dear Mr. Chu:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the E-CUBE 9, as described in your premarket notification:

#### Transducer Model Number

SC1-6	L3-12H
C1-6	SP1-5
SVC1-6	E3-10
VC1-6	L3-8
L3-12	SP3-8

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

If you have any questions regarding the content of this letter, please contact Joshua Nipper at (301) 796-6524.

Sincerelly Yours,

anine M. Morris

Acting Diffector

Division of Radiological Devices

Office of In Vitro Diagnostic Device

**Evaluation and Safety** 

Center for Devices and Radiological Health

510(k) Number (if known): K111864

# Indications for Use

	Device Name: E-CUBE 9
	Indications for Use:
	The device is intended for use by a qualified physician for the evaluation of soft tissue and blood flow in the clinical applications; Fetal; Abdominal (renal & GYN/pelvic); Pediatric; Small Organ (breast, testes, thyroid); Trans-rectal(TR); Trans-vaginal(TV); Musculo-skeletal(Conventional); Musculo-skeletal (Superficial); Cardiac (adult & pediatric); Peripheral Vascular (PV); and Urolog (including prostate).
,	Prescription Use AND/OR Over-The-Counter Use (Part 21 CFR 801 Subpart D) (Part 21 CFR 807 Subpart C)
	(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)
	Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)
	Office of in Vitro Diegnostic Devise Evaluation and Safety  510K

# **E-CUBE 9 Ultrasound System**

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation											
	В	M	PWD	CWD	Color	Power	Tissue	Combined*	Other**			
					Doppler	Doppler	Harmonic	(Specify)	(Specify)			
							Imaging					
Ophthalmic												
Fetal .	P	Р	Р		P	Р	Р	Р	P			
Abdominal	Р	Р	Р		P	Р	P	Р	P			
Intra-operative (Specify)												
Intra-operative (Neuro)												
Laparoscopic	1											
Pediatric	N	N	N		N	Ñ	N	N	N			
Small Organ	P	Р	Р		Р	Р	N	P				
(breast, testes, thyroid)	'	'	'			,	"	-				
Neonatal Cephalic	T											
Adult Cephalic								,	ļ			
Trans-rectal	P	P	Р.		Р	Р		Ρ .				
Trans-vaginal	₽	Р	Р		Ρ.	Р		₽				
Trans-urethral												
Trans-esoph. (non-Card.)	T											
Musculo-skeletal	Р	Р	P		Р	Р		Р				
(Conventional)	'	'	'		'		N					
Musculo-skeletal	Р	Р	Р		Р	Р	N	Р				
(Superficial) .		'										
Intravascular												
Cardiac Adult	Р	Р	Р	N	Р	P	Р	Р				
Cardiac Pediatric	N	N	N	N	N	N	N	N				
Intravascular (Cardiac)												
Trans-esoph. (Cardiac)												
Intra-cardiac												
Peripheral vessel	Р	Р	Р		Р	Р	N	Р				
Urology (including prostate)	N.	N	N		N	N	N	N				

N = new indication; P = previously cleared by FDA; E = added under appendix

### (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.109)

ALPINION MEDICAL SYSTEMS Co., Ltd.

(Division Sign-Off)

Division of Radiological Devices

Vitro Diagnostic Device Evaluation and Safety

<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D

### **E-CUBE 9 with SC1-6 Transducer**

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation											
	В	M	PWD	CWD	Color Doppler	Power Doppler	Tissue Harmonic Imaging	Combined* .(Specify)	Other** (Specify)			
Ophthalmic			-									
Fetal .	P	Р	P		Р	Р	Р	Р				
Abdominal	Р	Р	Р		Р	Р	P	Р				
Intra-operative (Specify)												
Intra-operative (Neuro)									٠			
Laparoscopic						_						
Pediatric	N	N	N		N	N	N	N				
Small Organ							,					
(breast, testes, thyroid)					· 1							
Neonatal Cephalic												
Adult Cephalic	1											
Trans-rectal	1											
Trans-vaginal						-	+					
Trans-urethral	T											
Trans-esoph. (non-Card.)												
Musculo-skeletal	1											
(Conventional)												
Musculo-skeletal		Г			-							
(Superficial)												
Intravascular												
Cardiac Adult	<u> </u>											
Cardiac Pediatric												
Intravascular (Cardiac)												
Trans-esoph. (Cardiac)	1											
Intra-cardiac									_			
Peripheral vessel												
Urology (including prostate)	N	N	N	-	N	N	N	N				

N = new indication; P = previously cleared by FDA; E = added under appendix

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Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.1	
APRINION MEDICAL SOFTEM	S Co., Ltd.
(Division Sign-Off) Division of Radiological Devices Office of In Vitro Diagnostic Device Evaluation	and Order
510K 6 100 06 6	and Sarety

<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D

# E-CUBE 9 with C1-6 Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation											
	В	М	PWD	CWD	Color	Power	Tissue	Combined*	Other**			
					Doppler	Doppler	Harmonic Imaging	(Specify)	(Specify)			
Ophthalmic			·									
Fetal	Р	Р	P		Р	P	Р	Р				
Abdominal	Р	Р	Р		Р	Р	P	Р				
Intra-operative (Specify)												
Intra-operative (Neuro)	T-											
Laparoscopic					·							
Pediatric	N	N	N		N	N	N	N				
Small Organ												
(breast, testes, thyroid)		١.	ļ						<u></u>			
Neonatal Cephalic												
Adult Cephalic												
Trans-rectal												
Trans-vaginal												
Trans-urethral	,											
Trans-esoph. (non-Card.)							·					
Musculo-skeletal												
(Conventional)	-		İ									
Musculo-skeletal												
(Superficial)			ļ				<u> </u>		<u> </u>			
Intravascular						<u> </u>			_			
Cardiac Adult							<u> </u>					
Cardiac Pediatric						<u> </u>			<u> </u>			
Intravascular (Cardiac)						<u> </u>						
Trans-esoph. (Cardiac)							<u> </u>		<u> </u>			
Intra-cardiac				•					<u> </u>			
Peripheral vessel							<u> </u>	ļ.,	<u> </u>			
Urology (including prostate)	N	N.	N		N	N	N	N				

N = new indication; P = previously cleared by FDA; E = added under appendix

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Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.109)	
ALPINION MEDICAL SYSTEMS Co., L	td.
Office of IniVitro Diagnostic Device Evaluation and Safety	

<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D

#### E-CUBE 9 with SVC1-6 Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation											
	В	М	PWD	CWD	Color	Power	Tissue	Combined*	Other**			
	ā.				Doppler	Doppler	Harmonic Imaging	(Specify)	(Specify)			
Ophthalmic			_									
Fetal	Р	Р	Р		Р	Р	Р	Р	Р			
Abdominal	Р	Р	Р		Р	Р	P	Р	Р			
Intra-operative (Specify)												
Intra-operative (Neuro)												
Laparoscopic .												
Pediatric	N	N	N		N	N	N	N	N			
Small Organ	1		· <del></del>									
(breast, testes, thyroid)												
Neonatal Cephalic												
Adult Cephalic												
Trans-rectal	1											
Trans-vaginal												
Trans-urethral		1						<u>.</u>				
Trans-esoph. (non-Card.)												
Musculo-skeletal			<u> </u>									
(Conventional)						,						
Musculo-skeletal												
(Superficial)		١										
Intravascular												
Cardiac Adult												
Cardiac Pediatric												
Intravascular (Cardiac)												
Trans-esoph. (Cardiac)	L								<u> </u>			
Intra-cardiac					·							
Peripheral vessel						ļ		1	<u> </u>			
Urology (including prostate)	N	N	N	-	N	N	N	N				

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Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.109)

APPINION MEDICAL SYSTEMS Co.,

(Birlisian Sign-Off)

Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D

### E-CUBE 9 with VC1-6 Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation										
	В	М	PWD	CWD	Color Doppler	Power Doppler	Tissue Harmonic Imaging	Combined* (Specify)	Other** (Specify)		
Ophthalmic											
Fetal	Р	Р	P		Р	Р	P	Р	Р		
Abdominal	P	Р	Р		Р	Р	Р	Р	Р		
Intra-operative (Specify)	<u>.</u>	T									
Intra-operative (Neuro)											
Laparoscopic	Ι.								<u></u>		
Pediatric	N	N	N		N	N	N	N	N		
Small Organ			-						}		
(breast, testes, thyroid)											
Neonatal Cephalic											
Adult Cephalic			•								
Trans-rectal					Ī				_		
Trans-vaginal									ļ <u>.</u>		
Trans-urethral							<u>_</u> _		ļ		
Trans-esoph. (non-Card.)				<u> </u>				· ·	<u> </u>		
Musculo-skeletal											
(Conventional)				]	<u> </u>						
Musculo-skeletal				T '							
(Superficial)			ļ					ļ	_		
Intravascular		Ţ							ļ		
Cardiac Adult							<u> </u>		ļ		
Cardiac Pediatric					,						
Intravascular (Cardiac)				<u> </u>			<u> </u>	<u> </u>	<u> </u>		
Trans-esoph. (Cardiac)							ļ		<u> </u>		
Intra-cardiac							ļ . <u>-</u>	_	ļ . <u>-</u>		
Peripheral vessel				<u> </u>	· ·	<u> </u>	ļ <u></u> -	<u> </u>	<del> </del>		
Urology (including prostate)	N	N	N		N	N	N -	N	<u> </u>		

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Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.109)	
APPINION MEDICAL SYSTEMS Co., Ltd.	,
(Division Sign-Off) Division of Radiological Devices	
Office on Vitro Diagnostic Device Evaluation and Safety	

<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D

### E-CUBE 9 with L3-12 Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation										
•	В	M	PWD	CWD	Color	Power	Tissue	Combined*	Other**		
					Doppler	Doppler	Harmonic	(Specify)	(Specify)		
							Imaging				
Ophthalmic	T-		_								
Fetal											
Abdominal							,				
Intra-operative (Specify)											
Intra-operative (Neuro)								<u> </u>			
Laparoscopic											
Pediatric	N	N	N		N	N	N	N			
Small Organ	P	Р	.P		Р	Р	P	Р			
(breast, testes, thyroid)	-	,	."			Ĭ					
Neonatal Cephalic			,								
Adult Cephalic								·	<u> </u>		
Trans-rectal			<u> </u>								
Trans-vaginal											
Trans-urethral		1							<u> </u>		
Trans-esoph. (non-Card.)				_					<u> </u>		
Musculo-skeletal	P	Р	Р		Р	P	N .	P			
(Conventional)	'	'	'		_		, , , , , , , , , , , , , , , , , , ,				
Musculo-skeletal	P	Р	P		Р	. Р	N	P	l .		
(Superficial)	'	'	'								
Intravascular						<u> </u>					
Cardiac Adult			-				<u> </u>				
Cardiac Pediatric							<u> </u>		<u> </u>		
Intravascular (Cardiac)	T -	l									
Trans-esoph. (Cardiac)									ļ		
Intra-cardiac					<u> </u>						
Peripheral vessel	Р	Р	P		P	P	N	Р	<u> </u>		
Urology (including prostate)	Ţ-								<u> </u>		

N = new indication; P = previously cleared by FDA; E = added under appendix

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Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.109)

ALPINION MEDICAL SYSTEMS Co., Ltd.

(Division Sign-Off)

Division of Radiological Devices

Office of In Witro Diagnostic Device Evaluation and Safety

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<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D

### E-CUBE 9 with L3-12H Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation										
	В	M	PWD	CWD	Color Doppler	Power Doppler	Tissue Harmonic Imaging	Combined* (Specify)	Other** (Specify		
Ophthalmic	<del>                                     </del>			<u> </u>		_					
Fetal								<u></u>			
Abdominal .											
Intra-operative (Specify)	1										
Intra-operative (Neuro)											
Laparoscopic							<u> </u>				
Pediatric	N	N	N		N	N		N	<u> </u>		
Small Organ (breast, testes, thyroid)	Р	Р	P		Р	Р		Р			
Neonatal Cephalic	_										
Adult Cephalic											
Trans-rectal											
Trans-vaginal	<u> </u>										
Trans-urethral	$T^-$								<u> </u>		
Trans-esoph. (non-Card.)											
Musculo-skeletal (Conventional)	Р	Р	Р		Р	Р		Р .			
Musculo-skeletal (Superficial)	Р	Р	Р		Р	Р		Р			
Intravascular											
Cardiac Adult	<b>—</b>										
Cardiac Pediatric											
Intravascular (Cardiac)									ļ		
Trans-esoph. (Cardiac)						ļ <u>.</u>	<u> </u>	<u> </u>			
Intra-cardiac				_		<u> </u>					
Peripheral vessel	P	P	Р		Р	P	<u> </u>	Р			
Urology (including prostate)							<u> </u>		<u> </u>		

N = new indication, P = previously cleared by FDA; E = added under appendix

# (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.109)

Auptivion Mappical SysTems Co., Ltd

(Division Sign-Off)

Division of Redialogical Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D

### **E-CUBE 9 with SP1-5 Transducer**

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation									
	В	М	PWD	CWD	Color Doppler	Power Doppler	Tissue Harmonic Imaging	Combined* (Specify)	Other (Specify)	
Ophthalmic										
Fetal	7									
Abdominal	Р	Р	Р		Р	Р	Р	P		
Intra-operative (Specify)			_		]					
Intra-operative (Neuro)										
Laparoscopic	1.									
Pediatric	N	N	N		N	N	N	N .		
Small Organ	1									
(breast, testes, thyroid)					1	<u> </u>				
Neonatal Cephalic										
Adult Cephalic	1	$\Box$								
Trans-rectal										
Trans-vaginal		1								
Trans-urethral										
Trans-esoph. (non-Card.)	1	1	<del></del>	_						
Musculo-skeletal		1								
(Conventional)										
Musculo-skeletal			<u> </u>		_	,				
(Superficial)										
Intravascular		$\top$	<del>                                     </del>	1	_					
Cardiac Adult	Р	P	Р	N	Р	Р	P	Р		
Cardiac Pediatric .	+-	1	<u> </u>						1	
Intravascular (Cardiac)	_	1	-			<u> </u>				
Trans-esoph. (Cardiac)	$\top$	$\dagger$								
Intra-cardiac	<u></u>	T								
Peripheral vessel	1									
Urology (including prostate)	1	1	1	1			1			

N = new indication; P = previously cleared by FDA; E = added under appendix

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH; Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.109)

ALPINION MEDICAL SYSTEMS Co., Ltd.

(Division Sign-Off)

Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D

# E-CUBE 9 with E3-10 Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation									
	В	М	PWD	CWD	Color Doppler	Power Doppler	Tissue Harmonic Imaging	Combined* (Specify)	Other (Specify	
Ophthalmic										
Fetal										
Abdominal	Ì									
Intra-operative (Specify)				•				<u></u>		
Intra-operative (Neuro)										
Laparoscopic										
Pediatric										
Small Organ (breast, testes, thyroid)										
Neonatal Cephalic		i		$\dagger$		-		-		
Adult Cephalic		<b>-</b>		<del> </del>		-				
Trans-rectal	Р	Р	P	<del> </del>	P	Р	<del>                                     </del>	Р	1	
Trans-vaginal	P	Р	P	<u> </u>	Р	P	ļ	Р		
Trans-urethral		1				<u> </u>				
Trans-esoph. (non-Card.)	1	1	· ·							
Musculo-skeletal (Conventional)		T								
Musculo-skeletal (Superficial)										
Intravascular						<u> </u>			<u> </u>	
Cardiac Adult		1.						· ·	ļ	
Cardiac Pediatric								<u> </u>		
Intravascular (Cardiac)	<u> </u>								ļ <u> </u>	
Trans-esoph. (Cardiac)	Ţ-						<u> </u>			
Intra-cardiac		-					1	ļ		
Peripheral vessel								<u> </u>		
Urology (including prostate)	N	N	N		N	N		N		

N = new indication; P = previously cleared by FDA; E = added under appendix

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.109)

ALPINION MEDICAL SYSTEMS Co., Ltd.

Division of Redological Devices

Office of In Vitro Diagnostic Devices Evaluation and Safety

<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D

#### E-CUBE 9 with L3-8 Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation									
	В	M	PWD	CWD	Color Doppler	Power Doppler	Tissue Harmonic Imaging	Combined* (Specify)	Other** (Specify)	
Ophthalmic										
Fetal										
Abdominal										
Intra-operative (Specify)										
Intra-operative (Neuro)										
Laparoscopic	1	_								
Pediatric	N	N	N		N	N		N		
Small Organ (breast, testes, thyroid)	N	N	N		N .	N		N		
Neonatal Cephalic										
Adult Cephalic					-					
Trans-rectal			· · · · ·							
Trans-vaginal										
Trans-urethral		_								
Trans-esoph (non-Card.)										
Musculo-skeletal (Conventional)	N	N	N		N .	Ņ		N		
Musculo-skeletal (Superficial)	N	N	N		N·	N .		N		
Intravascular										
Cardiac Adult										
Cardiac Pediatric		_								
Intravascular (Cardiac)										
Trans-esoph (Cardiac)										
Intra-cardiac									ļ	
Peripheral vessel	N	N	N		N	N		N	<u> </u>	
Urology (including prostate)								1		

N = new indication; P = previously cleared by FDA; E = added under appendix

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Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.109)

(Division Sgr-Off)
Division of Radiorogical Devices
Office of in Vitro Diagnostic Device Evaluation and Safety

<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D

### E-CUBE 9 with SP3-8 Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation									
	В	M	PWD	CWD	Color Doppler	Power Doppler	Tissue Harmonic Imaging	Combined* (Specify)	Other** (Specify)	
Ophthalmic										
Fetal						1			. ,	
Abdominal	N	N	N		N	N	N	N		
Intra-operative (Specify)						•				
Intra-operative (Neuro)										
Laparoscopic							-			
Pediatric	N	N	N		N	N	N	N		
Small Organ										
(breast, testes, thyroid)					ļ					
Neonatal Cephalic	1			1						
Adult Cephalic										
Trans-rectal	_									
Trans-vaginal										
Trans-urethral		_								
Trans-esoph. (non-Card.)				·						
Musculo-skeletal	1									
(Conventional)			1	į						
Musculo-skeletal			1							
(Superficial)							_			
Intravascular							_		<u> </u>	
Cardiac Adult	1	Ī -								
Cardiac Pediatric	N	N	N	N	N	N	N	N		
Intravascular (Cardiac)										
Trans-esoph. (Cardiac)										
Intra-cardiac									<u> </u>	
Peripheral vessel									<u> </u>	
Urology (including prostate)										

N = new indication; P = previously cleared by FDA; E = added under appendix

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Concurrence of CDRH, Office of In-Vitro Diagnostic Devices (OIVD)

Prescription User (Per 21 CFR 801.109)

Division of Radiological Devices
Office of In vitro Diagnostic Device Evaluation and Safety

<sup>\*</sup> Combined: B/Color Doppler, B/PWD, B/Color Doppler/PWD; \*\*Other: 3D, 4D